

# **METHODS AND APPARATUS FOR OPTIMIZING THE DELIVERY OF A SET OF GASES IN A PLASMA PROCESSING SYSTEM**

## **ABSTRACT**

A method for configuring a gas distribution channel, the gas distribution channel being configured for introducing a plasma source gas into a plasma processing chamber of a plasma processing system is disclosed. The method includes providing a metal conduit, providing a thermo-plastic tubular structure, and disposing the thermo-plastic tubular structure within the metal conduit. The method also includes applying heat and pressure to the thermo-plastic tubular structure, thereby causing the thermo-plastic tubular structure to mechanically couple with the metal conduit wherein an outer surface of the thermo-plastic tubular structure is longitudinally coupled with an inner surface of the metal conduit.